

Title (en)
METHOD FOR PRODUCING A LARGE-DIMENSIONED COMPONENT FROM NODULAR GRAPHITE IRON

Title (de)
VERFAHREN ZUR HERSTELLUNG EINES GROSS DIMENSIONIERTEN BAUTEILS AUS SPHÄROGUSS

Title (fr)
PROCÉDÉ DE FABRICATION D'UNE PIÈCE EN FONTE NODULAIRE DE GRANDES DIMENSIONS

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Application
EP 11736046 A 20110715

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Abstract (en)
[origin: EP2410137A1] Preparation of a component from nodular cast iron, comprises: constructing the component in such a manner that the component is assembled from a number of component parts (2, 3); producing the first and the second component from nodular cast iron, cast steel or by forging; pair wise providing the component parts, where one of the parting line (8) is formed; applying of a buffer material (9, 10) on the peripheral edge of first and second component part; applying the second component part with its edge section at the edge section of the first component part; and welding the edge sections. Preparation of a component from nodular cast iron, comprises: constructing the component in such a manner that the component is assembled from a number of component parts (2, 3), which are placed together under formation of butt joints (8) and are dimensioned and designed such that they are castable without critical defects in their material made of nodular cast iron; producing the first component part from nodular cast iron and the second component from nodular cast iron, cast steel or by forging; pair wise providing the component parts, where a first of the component part and second of the component part are arranged near to each other, with which from a peripheral edge (6) of an edge section (4) of the first component part (2) and a peripheral edge (7) of an edge section (5) of the second component part, one of the parting lines (8) is formed; applying of a buffer material (9, 10) on the peripheral edge of the first component part and on the peripheral edge of the second component part by reduced energy arc welding or friction welding or electron beam coating or thermal coating or induction coating; applying the second component part with its edge section at the edge section of the first component part, so that the peripheral edges lie together with its buffer material; and welding the edge sections, so that the parting line formed from the edge sections is welded and thus the first and the second component parts are welded together, so that the first and the second component parts form at least the component, where the buffer material is selected such that when welding the edge portions a structural change in the spheroidal cast material of the structural components is prevented.

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Citation (search report)
See references of WO 2012010512A2

Citation (examination)
FRONIUS: "Neue CMT-Anwendung - Fronius International GmbH - Pressemitteilung", 6 July 2007 (2007-07-06), Internet, pages 1 - 3, XP055532294, Retrieved from the Internet <URL:https://www.pressebox.de/pressemitteilung/fronius-international-gmbh/Neue-CMT-Anwendung/boxid/116115> [retrieved on 20181210]

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